

WO 00/24772

SEQUENCE LISTING

&lt;110&gt; E. I. du Pont de Nemours and Company

&lt;120&gt; SCORPION TOXINS

&lt;130&gt; BB1208

&lt;140&gt;

&lt;141&gt;

&lt;150&gt; 60/105,404

&lt;151&gt; 1998-10-23

&lt;160&gt; 17

&lt;170&gt; Microsoft Office 97

&lt;210&gt; 1

&lt;211&gt; 228

&lt;212&gt; DNA

&lt;213&gt; Leiurus quinquestriatus

&lt;400&gt; 1

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gtttggcact tctcttcacg acaggtgtgg agagtgtacg tgatgggttat attgcccagc 60
ccgaaaactg tgtctaccat tgcattccag attgcgacac gttatgtaag gataacgggtg 120
gtacgggtgg ccattgcgga tttaaacttg gacacggaat tgccctgctgg tgcaatgcct 180
tgcccagataa tgtagggatt atagttgatg gagtaaaatg tcataaag 228

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&lt;210&gt; 2

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Leiurus quinquestriatus

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; (1)..(11)

&lt;400&gt; 2

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Leu Ala Leu Leu Phe Met Thr Gly Val Glu Ser Val Arg Asp Gly Tyr
  1             5             10             15

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Ile Ala Gln Pro Glu Asn Cys Val Tyr His Cys Ile Pro Asp Cys Asp
          20             25             30

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Thr Leu Cys Lys Asp Asn Gly Gly Thr Gly Gly His Cys Gly Phe Lys
          35             40             45

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Leu Gly His Gly Ile Ala Cys Trp Cys Asn Ala Leu Pro Asp Asn Val
  50             55             60

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Gly Ile Ile Val Asp Gly Val Lys Cys His Lys
  65             70             75

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&lt;210&gt; 3

&lt;211&gt; 238

&lt;212&gt; DNA

&lt;213&gt; Leiurus quinquestriatus

&lt;400&gt; 3

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tagtttggca cttctcttca tgacaggngt ggagagtgtg cgtgacgggtt atattgccaa 60
gcccgaaaac tgtgcacacc attgctttcc agggctctcc ggttgcgaca cattatgtaa 120
ggaaaacggg ggtacgggtg gccattgcgg atttaaagtt ggacatggaa ctgctgctg 180
gtgcaatgcc ttgcccagata aagtagggat tatagtagat ggagtaaaat gccatcgc 238

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<210> 4  
 <211> 79  
 <212> PRT  
 <213> Leiurus quinquestriatus

<220>  
 <221> SIGNAL  
 <222> (1)..(12)

<400> 4  
 Ser Leu Ala Leu Leu Phe Met Thr Gly Val Glu Ser Val Arg Asp Gly  
 1 5 10 15  
 Tyr Ile Ala Lys Pro Glu Asn Cys Ala His His Cys Phe Pro Gly Ser  
 20 25 30  
 Ser Gly Cys Asp Thr Leu Cys Lys Glu Asn Gly Gly Thr Gly Gly His  
 35 40 45  
 Cys Gly Phe Lys Val Gly His Gly Thr Ala Cys Trp Cys Asn Ala Leu  
 50 55 60  
 Pro Asp Lys Val Gly Ile Ile Val Asp Gly Val Lys Cys His Arg  
 65 70 75

<210> 5  
 <211> 258  
 <212> DNA  
 <213> Leiurus quinquestriatus

<400> 5  
 atgaatcatt tggtaatgat tagtttggca cttcttttca tgacaggtgt ggagagtgggt 60  
 gtacgtgatg ggtatattgc ccagcccgaa aactgtgtct accattgctt tccaggggtcc 120  
 cccggttgcg acacattatg taaagagaac ggtgcttcga gtggccattg cggattttaa 180  
 gaaggacacg gacttgcctg ctggtgcaat gatctgcccg ataaagtagg gataatagta 240  
 gaaggagaaa aatgccat 258

<210> 6  
 <211> 87  
 <212> PRT  
 <213> Leiurus quinquestriatus

<220>  
 <221> SIGNAL  
 <222> (1)..(19)

<400> 6  
 Met Asn His Leu Val Met Ile Ser Leu Ala Leu Leu Phe Met Thr Gly  
 1 5 10 15  
 Val Glu Ser Gly Val Arg Asp Gly Tyr Ile Ala Gln Pro Glu Asn Cys  
 20 25 30  
 Val Tyr His Cys Phe Pro Gly Ser Pro Gly Cys Asp Thr Leu Cys Lys  
 35 40 45  
 Glu Asn Gly Ala Ser Ser Gly His Cys Gly Phe Lys Glu Gly His Gly  
 50 55 60  
 Leu Ala Cys Trp Cys Asn Asp Leu Pro Asp Lys Val Gly Ile Ile Val  
 65 70 75 80  
 Glu Gly Glu Lys Cys His Lys  
 85

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<210> 7  
 <211> 85  
 <212> PRT  
 <213> Buthus occitanus

<400> 7  
 Met Ser Ser Leu Met Ile Ser Thr Ala Met Lys Gly Lys Ala Pro Tyr  
 1 5 10 15  
 Arg Gln Val Arg Asp Gly Tyr Ile Ala Gln Pro His Asn Cys Ala Tyr  
 20 25 30  
 His Cys Leu Lys Ile Ser Ser Gly Cys Asp Thr Leu Cys Lys Glu Asn  
 35 40 45  
 Gly Ala Thr Ser Gly His Cys Gly His Lys Ser Gly His Gly Ser Ala  
 50 55 60  
 Cys Trp Cys Lys Asp Leu Pro Asp Lys Val Gly Ile Ile Val His Gly  
 65 70 75 80  
 Glu Lys Cys His Arg  
 85

<210> 8  
 <211> 252  
 <212> DNA  
 <213> Leiurus quinquestriatus

<400> 8  
 atgaattatt tgggtantgat tagtttggca cttctcctca tgacaggtgt ggagagtggg 60  
 cgtgatgctt atattgcccc gaactataac tgtgtatata attgtgcttt aaatccatat 120  
 tgcaacgatt tatgtaccaa gaacggtgct aagagtggct attgccaatg gttcgggttca 180  
 agtggaaaacg cctgctggtg catagatttg cccgataacg taccgattaa agtaccagga 240  
 aaatgccatc gc 252

<210> 9  
 <211> 84  
 <212> PRT  
 <213> Leiurus quinquestriatus

<220>  
 <221> SIGNAL  
 <222> (1)..(19)

<400> 9  
 Met Asn Tyr Leu Val Xaa Ile Ser Leu Ala Leu Leu Leu Met Thr Gly  
 1 5 10 15  
 Val Glu Ser Gly Arg Asp Ala Tyr Ile Ala Gln Asn Tyr Asn Cys Val  
 20 25 30  
 Tyr His Cys Ala Leu Asn Pro Tyr Cys Asn Asp Leu Cys Thr Lys Asn  
 35 40 45  
 Gly Ala Lys Ser Gly Tyr Cys Gln Trp Phe Gly Ser Ser Gly Asn Ala  
 50 55 60  
 Cys Trp Cys Ile Asp Leu Pro Asp Asn Val Pro Ile Lys Val Pro Gly  
 65 70 75 80  
 Lys Cys His Arg

<210> 10  
 <211> 65

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&lt;212&gt; PRT

&lt;213&gt; Buthus occitanus tunetanus

&lt;400&gt; 10

Gly Arg Asp Ala Tyr Ile Ala Gln Pro Glu Asn Cys Val Tyr Glu Cys  
 1 5 10 15

Ala Gln Asn Ser Tyr Cys Asn Asp Leu Cys Thr Lys Asn Gly Ala Thr  
 20 25 30

Ser Gly Tyr Cys Gln Trp Leu Gly Lys Tyr Gly Asn Ala Cys Trp Cys  
 35 40 45

Lys Asp Leu Pro Asp Asn Val Pro Ile Arg Ile Pro Gly Lys Cys His  
 50 55 60

Phe  
 65

&lt;210&gt; 11

&lt;211&gt; 256

&lt;212&gt; DNA

&lt;213&gt; Leiurus quinquestriatus

&lt;400&gt; 11

atgaaactct tacttttact cattgtctct gcttcaatgc tgattgaaag cttagttaat 60  
 gctgacggat atataagaag aaaagacgga tgcaagggtg catgcctgtt cggaaatgac 120  
 ggctgcaata aagaatgcaa agcttatggt gcctattatg gatattgttg gacctgggga 180  
 cttgcctgct ggtgcgaagg tcttccggat gacaagacat ggaagagtga aacaaacaca 240  
 tgcggtggca aaaagt 256

&lt;210&gt; 12

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Leiurus quinquestriatus

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; (1)..(21)

&lt;400&gt; 12

Met Lys Ile Ile Ile Phe Leu Ile Val Ser Ser Leu Met Leu Ile Gly  
 1 5 10 15

Val Lys Thr Asp Asn Gly Tyr Leu Leu Asn Lys Ala Thr Gly Cys Lys  
 20 25 30

Val Trp Cys Val Ile Asn Asn Ala Ser Cys Asn Ser Glu Cys Lys Leu  
 35 40 45

Arg Arg Gly Asn Tyr Gly Tyr Cys Tyr Phe Trp Lys Leu Ala Cys Tyr  
 50 55 60

Cys Glu Gly Ala Pro Lys Ser Glu Leu Trp Ala Tyr Ala Thr Asn Lys  
 65 70 75 80

Cys Asn Gly Lys Leu  
 85

&lt;210&gt; 13

&lt;211&gt; 255

&lt;212&gt; DNA

&lt;213&gt; Leiurus quinquestriatus

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<400> 13  
 atgaaactgt tacttctgct aactatctca gcttcaatgc tgattgaagg cttagttaat 60  
 gctgacggat atataagagg aggcgacgga tgcaagggtt catgcgtgat aaatcatgtg 120  
 ttttgtgata atgaatgcaa agctgctggt ggctcttatg gatattgttg ggccctgggga 180  
 cttgcctgct ggtgcgaagg tcttcagct gacagggaat ggaagtatga aaccaataca 240  
 tgcggtggca aaaag 255

<210> 14  
 <211> 85  
 <212> PRT  
 <213> Leiurus quinquestriatus

<220>  
 <221> SIGNAL  
 <222> (1)..(21)

<400> 14  
 Met Lys Leu Leu Leu Leu Thr Ile Ser Ala Ser Met Leu Ile Glu  
 1 5 10 15  
 Gly Leu Val Asn Ala Asp Gly Tyr Ile Arg Gly Gly Asp Gly Cys Lys  
 20 25 30  
 Val Ser Cys Val Ile Asn His Val Phe Cys Asp Asn Glu Cys Lys Ala  
 35 40 45  
 Ala Gly Gly Ser Tyr Gly Tyr Cys Trp Ala Trp Gly Leu Ala Cys Trp  
 50 55 60  
 Cys Glu Gly Leu Pro Ala Asp Arg Glu Trp Lys Tyr Glu Thr Asn Thr  
 65 70 75 80  
 Cys Gly Gly Lys Lys  
 85

<210> 15  
 <211> 255  
 <212> DNA  
 <213> Leiurus quinquestriatus

<400> 15  
 atgaaaataa taatttttct aattgtgtca tcattaatgc tgataggagt gaagaccgat 60  
 aatggttact tgcttaacaa agccaccggt tgcaagggtt ggtgtgttat taataatgca 120  
 tcttgtaata gtgagtgtaa actaagacgt ggaaattatg gctactgcta tttctggaaa 180  
 ttggcctgtt attgcgaagg agctccaaaa tcagaacttt gggcttacgc aaccaataaa 240  
 tgcaatggga aatta 255

<210> 16  
 <211> 85  
 <212> PRT  
 <213> Leiurus quinquestriatus

<220>  
 <221> SIGNAL  
 <222> (1)..(19)

<400> 16  
 Met Lys Leu Leu Leu Leu Ile Val Ser Ala Ser Met Leu Ile Glu  
 1 5 10 15  
 Ser Leu Val Asn Ala Asp Gly Tyr Ile Arg Arg Lys Asp Gly Cys Lys  
 20 25 30  
 Val Ala Cys Leu Phe Gly Asn Asp Gly Cys Asn Lys Glu Cys Lys Ala  
 35 40 45

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Tyr Gly Ala Tyr Tyr Gly Tyr Cys Trp Thr Trp Gly Leu Ala Cys Trp  
50 55 60

Cys Glu Gly Leu Pro Asp Asp Lys Thr Trp Lys Ser Glu Thr Asn Thr  
65 70 75 80

Cys Gly Gly Lys Lys  
85

<210> 17

<211> 61

<212> PRT

<213> Leiurus quinquestriatus

<400> 17

Asp Gly Tyr Ile Lys Arg Arg Asp Gly Cys Lys Val Ala Cys Leu Ile  
1 5 10 15

Gly Asn Glu Gly Cys Asp Lys Glu Cys Lys Ala Tyr Gly Gly Ser Tyr  
20 25 30

Gly Tyr Cys Trp Thr Trp Gly Leu Ala Cys Trp Cys Glu Gly Leu Pro  
35 40 45

Asp Asp Lys Thr Trp Lys Ser Glu Thr Asn Thr Cys Glu  
50 55 60